UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 26 2015

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Dennis V. McGinn
Assistant Secretary of the Navy
Energy, Installations and the Environment
1000 Navy Pentagon, Room 4E739
Washington, DC 20350-1000

Re: RCRA Section 7003 Unilateral Administrative Order, Gorst Creek Landfill, Port Orchard Washington

Dear Mr. McGinn:

On October 9, 2014, the United States Environmental Protection Agency (EPA) issued a Unilateral Administrative Order (UAO) to the United States Department of the Navy under the authority of Section 7003 of the Resource Conservation and Recovery Act (RCRA) regarding the Gorst Creek Landfill in Port Orchard, Washington. The UAO requires the Navy to address the imminent and substantial endangerment that may be presented by solid waste that has been disposed in Gorst Creek Ravine.

EPA issued this UAO to the Navy because permanent action is necessary to address the waste material disposed of at the site, of which the Navy is the largest identified contributor by virtue of its own contract documents. The weight of this landfill waste from the Puget Sound Naval Station collapsed the Gorst Creek culvert, which has restricted proper water flow since. The result has been periodic flooding up to 60 feet, increased sedimentation, damage to the creek ecosystem, disruption of fish passage and habitat and the spread of waste material as much as a half a mile downstream, including adjacent to a nearby highway. Until permanent action is taken, the site will continue to present a threat of flooding, slope erosion and instability, as well as a source of waste material, debris, and hazardous constituents to the surrounding environment.

The UAO requires the Navy to take action to address the imminent and substantial endangerment that may be presented by the solid waste in the landfill, including permanently re-routing the Creek around the landfill, stabilizing its slope, and restoring fish passage. Gorst Creek is important habitat for threatened Chinook salmon and steelhead, as well as coastal cutthroat trout, a state priority species. The landfill's slope failures degrade downstream water quality and habitat, just as the crushed culvert under the landfill prevents fish passage to upstream habitat.

EPA determined that the UAO was necessary since repeated attempts over many years by EPA Region 10 to engage the Navy in site response were unsuccessful. The Navy has claimed that CERCLA liability at the site had not been established because EPA had not established a clear nexus between items disposed of by the Navy and the site contamination at issue.

After the UAO was issued, the Navy was provided, and has since taken, the opportunity to provide additional information on the matter, and to present all evidence that it has which should be considered in EPA's decision on a final order. EPA has carefully reviewed and fully considered the various materials and information provided by the Navy and discussed at the meeting held at the Navy's request on November 21, 2014. Those materials do not contradict the evidence that the Navy was a large contributor of solid waste at the Gorst Creek Landfill, and that the solid waste disposed at the site may present an imminent and substantial endangerment to health and the environment. Therefore, I conclude that the UAO as issued, including the prescribed response action, is necessary and appropriate to abate the endangerment. The basis for the Agency's determination on the UAO is provided in greater detail in the enclosure.

Pursuant to Section XVII, Paragraph 85 of the UAO, the UAO shall become effective, as specified in this letter, within five (5) calendar days of your receipt of this decision. Then, the Navy, pursuant to Section XXII, Paragraph 93 of the UAO, must notify EPA in writing of its intent to comply with the UAO no later than fifteen (15) calendar days after its effective date. Navy Deputy Assistant Secretary Donald Schregardus, at our meeting in November, made clear the Navy's interest in working more collaboratively with EPA at this site. The Agency is ready to do so, under the provisions of the order or, once it is effective, under modified or subsequent provisions which we might jointly prefer to the original ones. In light of this, EPA is modifying the UAO and extending the time frame for submission of the first deliverable, the Site Management Plan, as reflected in Section VII, Paragraph 46 from forty-five (45) calendar days to ninety (90) calendar days from the UAO's effective date.

We look forward to working with the Navy to ensure a timely response that protects health and the environment from the risk posed by the Gorst Creek Landfill.

Sincerely,

Cynthia Giles

Cynthia Giles
Assistant Administrator

Enclosure

cc: Mathy Stanislaus
Shari Wilson
Dennis McLerran
Donald Schregardus

ENCLOSURE

EPA RESPONSE TO ISSUES RAISED BY THE U.S. NAVY
RCRA SECTION 7003 UNILATERAL ADMINISTRATIVE ORDER
DOCKET NUMBER RCRA-10-2015-0020

I. Background and Procedural History

On October 9, 2014, the United States Environmental Protection Agency (EPA) issued a Unilateral Administrative Order (UAO) under the authority of section 7003 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6973, to the United States Department of the Navy (Navy). The UAO requires the Navy to implement a response action at the Gorst Creek Landfill, located at 4275 State Highway 3 Southwest in Port Orchard, Washington, to improve the structural stability of the landfill and to prevent the ongoing release of waste debris and contaminants caused by periodic flooding and erosion of the landfill. Specifically, the response action involves rerouting Gorst Creek around the landfill through a newly constructed creek ravine, permanently closing the existing collapsed creek culvert beneath the landfill, stabilizing the landfill slopes and placing a cover of clean soil on top of the landfill. The UAO further requires that the new creek ravine be designed and constructed to restore fish habitat and migration, and that vegetation be established to prevent further erosion.

EPA issued the UAO based on its determination that the Navy contributed to the past handling, transportation and/or disposal of solid waste that may present an imminent and substantial endangerment to health or the environment. For a period of at least one year, commencing on July 1, 1969, the Navy transported and disposed of solid waste from the Puget Sound Naval Station to the Gorst Creek Landfill.

As provided in section XVII of the UAO, and pursuant to section 6001(b) of RCRA, 42 U.S.C. § 6961(b), the Navy submitted a request to confer with EPA about the UAO in a letter dated October 21, 2014. The Navy presented its views on the UAO to EPA at a conference held on November 21, 2014. EPA has since fully considered the issues raised by the Navy during the conference and in the written materials provided by the Navy prior to reaching this final determination on the UAO.

II. Summary

The Navy has acknowledged that it disposed of waste at the landfill and, according to available evidence, was the largest single waste contributor to the landfill. Although there is uncertainty as to the exact amount of waste contributed by the Puget Sound Naval Station given the absence of waste disposal records, the Navy's own contract specification document for disposal provides a reliable basis for this estimation. Further, it was the weight of the landfill (including its Navy waste) which caused the Gorst Creek culvert to collapse, restricting water flow and creating problems at the site. EPA, after considering public comments, chose an appropriate remedy, one which would more permanently restore the creek ecosystem, as well as fish passage and habitat. Finally, the Navy can perform the work directed by the UAO in accordance with the law, as the UAO does not direct the Navy to use any particular appropriation or funding source.

III. The UAO's Factual Statements are Supported by the Record

EPA after thoroughly reviewing and considering the materials and information provided by the Navy finds that the UAO is factually accurate and supported by evidence in the record. EPA does not find persuasive the Navy's claim that the UAO contains several inaccurate and unsupported factual statements, including the specific volume of Navy waste in the landfill and whether the landfill was permitted at the time of the Navy contract.

First, the Navy does not dispute that it transported and disposed of solid waste at the landfill, but claims that the UAO overstates the amount and type of solid waste it contributed. Paragraph 12 of the UAO states that the Navy may be responsible for up to 125,000 cy of waste at the landfill. In its response, the Navy asserts that its contribution would be, at most, 93,000 cy, but is more accurately estimated at 35,000 cy. The basis for the differing annual disposal estimates put forth by the Navy and UAO originates from the same contract specification document for contract number 13-69-0181. This contract specification is the most reliable record available that describes the Navy's waste disposal at the landfill.

The contract specification estimated the total amount of waste to be disposed over the course of the year-long contract as 124,955 cy. This annual estimate was used in paragraph 12 of the UAO as the basis for the Navy's contribution to the landfill. Recognizing that this was an annual estimate, paragraph 12 of the UAO states that the Navy "…*may be* responsible for generating *up to* 125,000 cy…" Therefore, EPA disagrees that there is no factual basis for the disposal estimate as enumerated in the UAO.

In order to obtain its annual disposal estimate of 93,000 cy, the Navy relied on monthly disposal estimates by waste category provided by the contract specification. It identified these monthly disposal estimates as industrial trash (6,000 cy), contaminated garbage (25 cy), timber and logs (1,000 cy), oils, tars and chemicals (50 cy)[1] and sawdust (650 cy). The Navy's annual disposal estimate was derived by summing the monthly category estimates and multiplying by twelve (7725 cy x 12) to obtain an annual disposal estimate of 93,000 cy.

The Navy then states that its volumetric contribution was further reduced from 93,000 to 35,000 cy based on waste burning and salvaging that occurred at the landfill. EPA agrees there is evidence that at least some Navy waste was burned or salvaged, but disagrees that it is possible to quantify a reduction in volume without additional evidence. The Navy's calculation of reduced waste volume is based on generalized estimates and assumptions that are unsupported by evidence. There is no information describing the type or amount of waste burned, burning practices and conditions, or the type and quantity of materials salvaged, to support the Navy's estimate of 35,000 cy. Further undermining the Navy's contribution estimate is evidence that waste burning did not continue throughout the year-long disposal contract because Kitsap

[1] The Navy claims there is no record that it sent chemical or liquid waste to the landfill. However, the 1968 and 1969 contract specifications estimated that 50 cy of oil, tar and chemicals would be disposed each month, a number the Navy relied on in calculating its ceiling estimate of 93,000 cy. The contract specification is the most reliable record available that describes the Navy's waste disposal at the landfill.

County ordered the landfill operator to cease all burning less than three months into the contract and due to the implementation of new air quality requirements.

EPA acknowledges there is uncertainty concerning the amount of waste the Navy contributed to the landfill. The contract specification provides disposal estimates but the actual contracted service was for the disposal of all waste the Navy delivered to the landfill regardless of contract estimates. Therefore, the actual volume of Navy waste may have been more or less than the estimates in the contract specification. Lacking waste disposal records, however, the contract specification provides the best available evidence of the Navy's landfill contribution. Even assuming the Navy's reduced estimate of 35,000 cy is an accurate approximation, the Navy would, nevertheless, still be the largest single waste contributor to the landfill.[2]

Second, EPA noted in the UAO that the Navy continued to send waste to the landfill despite knowing that the landfill lacked the required operating permit. The Navy contends that the permit status of the landfill is irrelevant to RCRA liability, and regardless the landfill was permitted when the contract started and ended. EPA agrees that the permit status of the landfill is irrelevant to the Navy's liability, but maintains that the UAO is factually correct and the landfill did not have an operating permit during the entire term of the Navy contract.

Prior to the start of the Navy contract on July 1, 1969, the landfill operator had applied for, but not yet been issued an operating permit. The Department of Public Health Bremerton-Kitsap County inspected the landfill in August 1969 and concluded that the location of the dump, landfill cover, and salvage and burning operations were unsatisfactory. When the landfill operator failed to take corrective measures, the county sued in November 1969 to permanently enjoin the landfill from operating without a permit.[3] A settlement of the lawsuit was reached in June 1970 but the county did not issue the landfill a permit until after the Navy disposal contract had concluded. Accordingly, the landfill was not permitted at any time during the Navy disposal contract.

IV. The Facts Support EPA's Finding Under RCRA's Imminent and Substantial Endangerment Provisions

Gorst Creek Landfill may present an imminent and substantial endangerment and the comprehensive administrative record documenting conditions at Gorst Creek Landfill supports issuance of a UAO under section 7003 of RCRA, 42 U.S.C. § 6973. It is the weight of the waste

[2] The 1998 Hart Crowser Potentially Liable Party Report prepared for the Navy asserts, based on a review of aerial photographs, that of the total 150,000 cy of waste in the landfill, 115,000 cy were disposed between 1968-1972, 20,000 cy between 1972-1978, and 10,000 cy after 1978. The Navy's disposal occurred during the period when the landfill received approximately 75% of its total waste. Based on this estimate and the description of other landfill customers during this period as local residents and contractors, it is improbable any other single waste generator contributed over 35,000 cy of waste.

[3] The landfill operated and the Navy continued to dispose of waste during the lawsuit. The Navy received communications concerning landfill compliance problems from Kitsap County (Aug. 11, 1969), an attorney representing neighbors of the landfill (July 31, 1969) and Senator Henry Jackson (Dec. 1, 1969). The county and Senator Jackson requested the Navy stop disposing of waste in the unlicensed dump. The Navy declined, citing contract provisions stipulating that Navy waste became property of the landfill when delivered and requiring the landfill to operate in compliance with all local and state laws.

in the landfill (of which the Navy is the largest contributor based on available evidence) which has caused the Gorst Creek culvert to collapse in at least two locations which restricts water flow. When it rains the creek impounds upstream of the landfill, at times reaching depths of 40 to 60 feet. Impounded water seeps through the landfill and occasionally flows over its surface, causing erosion and failure of the landfill slope. Slope failures have uprooted trees, altered the course of the creek, increased sedimentation, and distributed waste material up to ½ mile downstream. The creek is habitat for threatened Chinook salmon and steelhead, as well as coastal cutthroat trout, a state priority species. Landfill slides harm the downstream environment by degrading water quality and habitat, and the crushed culvert beneath the landfill blocks fish passage and migration to upstream habitat.

The landfill also presents a threat of flooding and damage to State Highway 3, located approximately 100 yards downstream and where 44,000 vehicles travel each day. Waste debris from previous landfill slides has blocked the culvert beneath the highway, prompting responses from state and local officials to clear the blocked culvert to prevent Gorst Creek from eroding the highway embankment. Such culvert obstruction and attendant erosion would destabilize the roadway, and potentially flood the highway, creating dangerous conditions for motorists. To mitigate impacts to the highway, the Washington Department of Transportation and/or Kitsap County Health District conduct inspections of the landfill and highway culvert, and take response actions as necessary, each time the area receives heavy rainfall and a landfill slide is expected.

With respect to EPA's determination that the landfill may present an imminent and substantial endangerment, the Navy first questions the imminence of the landfill endangerment, noting that site conditions and wastes collected at the landfill have been known for decades and EPA has taken no emergency action to address these conditions. However, an endangerment need not be an emergency to be imminent. *United States v. Waste Indus., Inc.*, 734 F.2d 159, 165 (4th Cir. 1984). Rather, an endangerment is imminent if the factors giving rise to it are present, even though the harm may not be realized until some future time. *United States v. Valentine*, 856 F. Supp. 621, 626 (D. Wyo. 1994) *citing United States v. Conservation Chem.*, 619 F. Supp. 162, 193-94 (D. Mo. 1985). In addition, although the landfill has been around since 1968, the crushed culvert contributing to the imminence of the endangerment occurred much more recently. The first major landfill slope failure occurred in 1997. Since then, Gorst Creek has impounded behind the landfill each winter and significant slope failures have been documented in 2002, 2007, 2009 and 2012. Each of these slope failures prompted an assessment of the highway culvert and cleanup response from Kitsap County and the Washington Department of Transportation. The conditions giving rise to these events are still present and are likely to result in future flooding, landfill erosion and slope instability, and the release of waste and contaminants to the downstream environment.

The Navy also questions the endangerment presented by the landfill, referring to a Washington Department of Ecology (Ecology) statement that the site is primarily a geotechnical problem and EPA's Engineering Evaluation and Cost Analysis (EE/CA) conclusion that ecological risk is localized to limited areas. An endangerment under RCRA section 7003 is threatened or potential harm, but does not require proof of actual harm. *Dague v. Burlington*, 935 F.2d 1343, 1356 (2nd Cir. 1991) *rev'd on other grounds*, 505 U.S. 557 (1992). In the case of the Gorst Creek landfill, as noted above and documented in the administrative record, there is both actual harm to the

environment, including Chinook salmon, steelhead, and coastal cutthroat trout, and potential harm to the environment and public.

The Navy is correct that Ecology characterized the landfill "…as primarily a geotechnical problem and less a toxic cleanup issue." Letter, Ecology to Bremerton-Kitsap County Health District, *Gorst Creek Landfill Geotechnical and Environmental Concerns* (Feb. 14, 2003). Ecology's characterization is correct because the geotechnical issues at the landfill, including the crushed culvert and unstable landfill slopes, are what cause the flooding and landfill slope failures that release waste debris and contaminants, which in turn harms the downstream environment and threatens listed and native fish species. As noted, the landfill geotechnical problems also present a threat to State Highway 3 which requires continued oversight of the problem and periodic response work by the Washington Department of Transportation and Kitsap County Health District. Significantly, Ecology does not say the landfill is *only* a geotechnical problem. *Id*. In fact, prior to requesting EPA's assistance with the site, Ecology's Toxic Cleanup Program placed the landfill on the state's Hazardous Sites List and assigned it the highest priority ranking.

Ecology's assessment is consistent with the conclusions in EPA's EE/CA that unstable landfill slopes and flooding may continue to wash waste to the downstream environment and leach contaminants from the landfill. In addition to the physical threat presented to the downstream environment, the landfill is a documented source of polychlorinated biphenyls (PCBs), pesticides including DDT and DDE, semi-volatile organic compounds (SVOCs), and metals including lead, chromium, copper, zinc and mercury.[4] As Gorst Creek impounds upstream and seeps through the landfill, contaminants within the landfill are mobilized and, along with waste debris, are released to the downstream environment.

The Navy also contends that, if the landfill presents and imminent and substantial endangerment, EPA should have proceeded under the Comprehensive Environmental Response, Compensation and Liability act (CERCLA), 42 U.S.C. § 9601 *et seq.*, because EPA used this authority to investigate the site. But EPA may issue a RCRA section 7003 order even when it has been investigating a site under CERCLA, provided that EPA can establish the legal basis for the

[4] During several EPA sampling events over the last ten years, these waste constituents exceeded health based and ecological based screening levels. For example, in November 2003, EPA collected onsite samples from soil, groundwater, surface water, sediment and six borehole samples of the landfill. Onsite sampling results identified the following substances at concentrations that exceeded health-based screening levels: two PCBs (Aroclors 1242 and 1254); six pesticides (aldrin, alpha-chlordane, dieldrin, endrine, keton, gamma-chlordane, and heptachlor); two metals (arsenic and lead); and four SVOCs (2-methylnaphthalene, napthalene, phenanthrene and bis[2-ehtylhexyl]phthalate). In November 2003, EPA also collected three additional offsite sediment samples in Gorst Creek at locations downstream of the landfill that detected concentrations of dichlorodiphenyltrichloroethane (DDT), dichlorodiphenyldichloroethylene (DDE), PCBs and copper at levels exceeding federal ecological screening levels. Additional sampling of sediments between the landfill and Highway 3, conducted in July 2011, exceeded threshold levels for copper, nickel, zinc and three PCBs (Aroclors 1248, 1256 and 1260). Probable effects levels were exceeded for two PCBs (Aroclors 1248 and 1256). Surface soil samples collected at the landfill during the July 2011 event exceeded human health screening levels for chromium. In November 2012, sediment samples collected by the Washington Department of Transportation in Gorst Creek adjacent to Highway 3 detected the highest concentrations of two PCBs (Aroclor-1254 and 1260) found in Gorst Creek sediments to date.

RCRA order. In fact, the Department of Justice's Office of Legal Counsel has noted that EPA could issue a RCRA imminent and substantial endangerment order for a DOD facility listed on the NPL. *See* Letter, Office of Legal Counsel to EPA, *Issuance of Imminent and Substantial Endangerment Orders at DoD Facilities* (Dec. 1, 2008).

Finally, as the Department of Justice's Office of Legal Counsel has noted, courts have given EPA's determination of an imminent and substantial endangerment and the appropriateness of the relief sought "substantial deference" and where EPA can show that the actions of a federal agency "*may* present an imminent and substantial endangerment to health or the environment," EPA is authorized to issue "such orders as *may* be necessary to protect human health and the environment" as EPA has determined in this case. *Id.* (emphasis added).

V. The Record Supports the Response Action Directed by the UAO

EPA maintains that the response action of rerouting Gorst Creek around the landfill and stabilizing the landfill slopes as directed by the UAO is appropriate and fully supported by the administrative record. After weighing public comments solicited during the EE/CA process, EPA chose a remedy that would more permanently restore the creek ecosystem as well as fish passage and habitat, instead of a short term fix.

The EE/CA proposed four response alternatives for public comment including (1) no action, (2) landfill removal and restoration of Gorst Creek ravine, (3) rerouting Gorst Creek around the landfill and stabilization of landfill slopes, and (4) installation of a new culvert by micro-tunneling and pipe jacking the existing crushed culvert. Though the EE/CA identified a preferred alternative, EPA solicited public comment on all alternatives discussed in the EE/CA and reserved its final decision until after consideration of public comments.

Comments on the EE/CA were received from the Kitsap County Health District, the Washington Department of Fish and Wildlife (WDFW) and the Suquamish Tribe.[5] The WDFW and Suquamish comments opposed the preferred culvert replacement alternative, criticizing that alternative as a temporary solution, destined to fail, that would be difficult to maintain and result in the continued impairment and degradation of the creek ecosystem, fish habitat, and fish passage.

The WDFW and Suquamish commented that as long as the landfill occupies the stream corridor, there exists a potential for downstream habitat degradation. These commenters also noted that installation of a new culvert under the landfill would not restore fish passage. Fish would not travel upstream through a new 880-foot culvert, so the landfill would continue to be a barrier to the upper reaches of Gorst Creek, precluding access to upstream habitat. The WDFW raised concerns that the 880-foot culvert would be extremely challenging to maintain and would likely collapse again under the weight of the landfill. The Suquamish raised additional concerns that the streamlined ecological and human health risk assessments in the EE/CA did not adequately

[5] In March 2011, EPA offered and the Navy declined an opportunity to participate in the development of the EE/CA. In May 2012, EPA provided the Navy an advanced copy of the EE/CA, notified the Navy of the upcoming public comment period, and encouraged the Navy to provide comments on the proposed response alternatives. The Navy acknowledges it received and reviewed the EE/CA but did not comment because it disagreed that it was liable.

consider risks to Tribal populations, who have treaty rights to harvest fish and shellfish in Gorst Creek, a usual and accustomed fishing area for the Suquamish. Both the WDFW and Suquamish supported the response alternative directed by the UAO as a more permanent remedy that would restore the creek ecosystem and fish passage and habitat.

EPA considered and agreed with the comments submitted by the WDFW and the Suquamish. In selecting the response action required by the UAO, EPA accounted for the practical concerns raised by the commenters. A remedy that just replaces the crushed culvert would be a short-sighted fix. A replaced 880-foot culvert would be difficult to maintain and keep clear of debris, and there is a high probability the culvert would collapse again in the future and require additional response action. EPA concluded that although the culvert replacement alternative was cheaper in the near term, heightened operation and maintenance requirements and the likelihood of a future culvert failure made this alternative less protective and more expensive over the long-term.

The Suquamish Tribe also raised important considerations about restoration of fish habitat and passage in the context of treaty rights with the State of Washington and the United States. The United States brought an action against the State of Washington to define the scope of the duty imposed under the Stevens Treaties, which secure the right of Northwest Tribes, including the Suquamish, to take fish. *United States v. Washington*, 2007 U.S. Dist. LEXIS 61850 (W.D. Wash. Aug. 22, 2007). The Court held that Washington breached its duty under the treaties and ordered the state to refrain from building or operating culverts that hinder fish passage and thereby diminish the number of fish available for the Tribes. *Id.* In a recent subproceeding to this litigation, concluded after the public comment period on the EE/CA, the Court issued a permanent injunction ordering Washington to repair and replace culverts which block passage of anadromous fish. 2013 U.S. Dist. 48850 (W.D. Wash. Mar. 29, 2013). Thus, EPA also considered the treaty rights issues raised by the Suquamish and the outcome of the federal court litigation in selecting the appropriate response required by the UAO.

In addition, the Navy raises concerns that EPA did not study the environmental effects of the response itself, including its potential impact on listed species, its compliance with EPA landfill closure requirements, and whether any Army Corps permits may be needed. These concerns are implementation issues. EPA has considerable expertise overseeing response actions and will work with the Navy to assure that the approved design and implementation will minimize any concomitant environmental impacts while still achieving the environmentally beneficial purpose of restoring the natural creek ecosystem. For example, concerns about impacts to fish species can be addressed by planning construction for the dry season when the flow of Gorst Creek at the landfill is minimal and fish species are not present. The need for permits from the Army Corps will be determined during the response action design, but EPA does not anticipate that any such permit will be difficult to obtain. Finally, the response action is not intended to bring the decades-old landfill into compliance with modern closure standards, but will address the imminent and substantial endangerment presented by the landfill.

VI. The UAO Does Not Require the Navy to Act Contrary to Law

The Navy can perform the work directed by the UAO in accordance with the law, as the UAO does not direct the Navy to use any particular appropriation or funding source to implement the work. Consequently, the UAO does not require the Navy to do anything that would violate the Anti-Deficiency Act.

The Navy states that it is concerned that the UAO imposes funding and other requirements that present legal impediments to a response action. The Navy contends that compliance with the UAO would violate the Anti-Deficiency Act, 31 U.S.C. § 1341, because the Navy possesses no fiscal authority to fund the required work. The Navy also cites the Defense Environmental Restoration Program (DERP) as authorizing the Department of Defense to conduct response actions only at property it currently owns and/or operates or at properties it formerly owned and/or operated. This would not include the Gorst Creek Landfill. If the Navy determines that it is not able to use its Environmental Restoration Account to implement this UAO, then another account or more general appropriation may be available. Finally, if the Navy is unable to use another program or existing appropriation to perform the actions required by the UAO, then the Navy should seek authorization and appropriation from Congress to perform the actions required by the UAO. The absence of a clear funding source does not obviate the Navy's obligation to provide funds if it has responsibility at this site.

The Navy also states that the response action requires it to acquire property adjacent to the landfill in order to redirect Gorst Creek around the landfill. The Navy claims that it lacks general authority to acquire property for this purpose. EPA understands that designing a new route for Gorst Creek around the landfill may involve the use of adjacent property. The UAO, however, does not require the Navy to acquire or take possession of any property. The Navy may be required, as part of the response costs, to compensate the adjacent property owner for any diminution in fair market value of the property that may result from permanently rerouting the creek. The property in question is currently undeveloped and EPA is prepared to assist the Navy in obtaining access and coordinating with the property owner to accomplish the required work.

In addition, the UAO requires the Navy to conduct operation and maintenance (O&M) of the response action for 30 years after the remedy is complete. The Navy argues that this requirement is an impermissible open-ended funding obligation. The creek reroute directed by the UAO is a response action that EPA projects will result in minimal O&M requirements, which is one reason EPA selected this option over culvert replacement that involves significant continued annual maintenance and would likely require future response actions. EPA anticipates that once the creek reroute, landfill stabilization and erosion controls are satisfactorily completed, future O&M activities will be limited to visual inspections conducted every few years or following a significant event such as an earthquake. The exact O&M requirements will be developed by the Navy in an O&M plan submitted for EPA approval. The Agency expects the Navy to plan appropriately for funding what are expected to be nominal and infrequent costs.

Finally, in an attachment to written materials provided during the conference with EPA, the Navy claims that there is a built-in schedule conflict within the order which will prohibit compliance with the order. It is not clear to EPA what "built-in schedule conflict" within the

UAO prohibits compliance. The Site Management Plan sets forth the plan detail for how the Navy will accomplish the response action. The schedule for the Design Report required by paragraph 49 of the UAO does not begin until after EPA issues final approval of the Site Management Plan. The first requirement is a preliminary design report (30%), which is due 90 days after EPA approves the Site Management Plan.

With respect to the Site Management Plan, the data gaps report required by paragraph 46.a and the field work required by paragraph 46.b do not need to be completed before EPA approves the Site Management Plan. Rather, the Site Management Plan should include the proposed activities and schedule for any field work and additional data collection. In the event schedule problems arise due to circumstances outside of the Navy's control, such as the inability to secure access or use of the adjacent property, the Navy can request modification to the work schedule.